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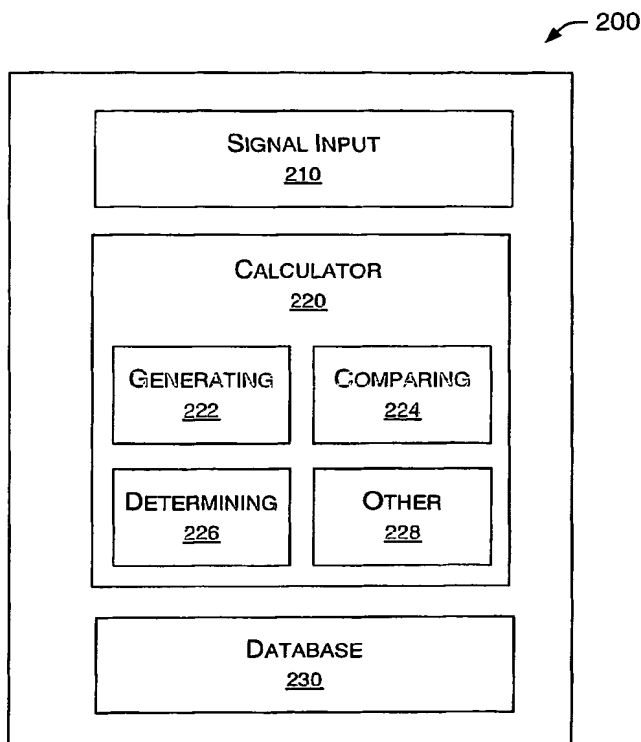
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(54) Title: **WAFER CHARACTERISTICS VIA REFLECTOMETRY**

EXEMPLARY DEVICE



(57) **Abstract:** Various exemplary methods (800, 900, 1000, 1100) are directed to determining wafer thickness and/or wafer surface characteristics. An exemplary method (900) includes measuring reflectance of a wafer and comparing the measured reflectance to a calculated reflectance or a reflectance stored in a database. Another exemplary method (800) includes positioning a wafer on a reflecting support to extend a reflectance range. An exemplary device (200) has an input (210), analysis modules (222-228) and optionally a database (230). Various exemplary reflectometer chambers (1300, 1400) include radiation sources positioned at a first altitudinal angle (1308, 1408) and at a second altitudinal angle (1312, 1412). An exemplary method includes selecting radiation sources positioned at various altitudinal angles. An exemplary element (1650, 1850) includes a first aperture (1654, 1854) and a second aperture (1658, 1858) that can transmit reflected radiation to a fiber and an imager, respectfully.

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